

Title V Federal Operating Permit Evaluation  
C N Jolly Cabinets, Inc.

5/15/97

Page 1

8411 Jackson Road SACRAMENTO METROPOLITAN Sacramento, CA 95826

AIR QUALITY  
MANAGEMENT DISTRICT

TITLE V FEDERAL OPERATING PERMIT EVALUATION

APPLICATION NO.: 96-11  
DATE: 5/15/96  
ISSUING ENGINEER: Jorge DeGuzman

FACILITY INFORMATION:

FACILITY NAME: C N Jolly Cabinets, Inc.

LOCATION: 9946 Mills Station Rd.  
Sacramento, CA 95827

MAILING ADDRESS: 9946 Mills Station Rd.  
Sacramento, CA 95827

RESPONSIBLE OFFICIAL: Clifford N. Jolly, President - (916) 366-8761

CONTACT PERSON: Same

FACILITY DESCRIPTION:

C N Jolly Cabinets, Inc. is engaged in the manufacture of kitchen and bathroom cabinets at their facility located at 9946 Mills Station Road, Sacramento. Mr. Clifford Jolly established this wood cabinet shop in May 1977 and was incorporated in 1979. C N Jolly Cabinets is now applying for a Title V federal operating permit for its facility which include 3 paint spray booths (for stain, sanding sealer, and lacquer application) and four saw dust collection systems which include four bag houses.

INSIGNIFICANT EMISSIONS UNIT INFORMATION:

The following systems are exempt pursuant to Rule 201, Section 122 because PM10 emissions from each system are under 2 lb/day and each system does not vent sanding operations and each system has a flow rate of less than 12,000 cfm (District's policy for requiring permits for baghouses venting woodworking operations):

Dust Collection System 2

Manufacturer: Murphy Rogers Baghouse  
Model No.: MRT-7A  
Storage Capacity: 7 ft<sup>3</sup>  
Filter Area: 44 ft<sup>2</sup>  
Fan: 3 hp, 1206 cfm

Dust Collection System 5

Manufacturer: Murphy Rogers Baghouse  
Model No.: MRA-15-185H

Storage Capacity: 260 ft<sup>3</sup>  
Filter Area: 668 ft<sup>2</sup>  
Fan: 20 hp, 5704 cfm

Dust Collection System 6  
Manufacturer: Murphy Rogers Baghouse  
Model No.: MRC-9B5-D  
Storage Capacity: 14 ft<sup>3</sup>  
Filter Area: 104 ft<sup>2</sup>  
Fan: 5 hp, 1656 cfm

The potential to emit for each of the sawdust handling systems is as follows (see Appendix A for calculations):

Potential PM<sub>10</sub> Emissions from the Sawdust Handling Systems

Process	lbs/day	lbs/quarter (A)	tons/year
Sawdust Handling System #2	0.4	36.8	0.1
Sawdust Handling System #5	2.0	184.0	0.4
Sawdust Handling System #6	0.6	55.2	0.1

A - The quarterly emissions are based on 92 day/quarter.

Note: Although each system is vented to a baghouse, potential to emit was calculated assuming worst case scenario with no controls.

SIGNIFICANT EMISSIONS UNIT INFORMATION:

Paint Spray Booth #1 Manufacturer: Binks  
(P/O 11657) Model & Serial No.: Unknown  
Booth Dimensions: 8'-0" W x 8'-0" H x 7'-6" D  
Fan Rating: 2 H.P.

Paint Spray Booth #2 Manufacturer: Viking  
(P/O 11658) Model & Serial No.: Unknown  
Booth Dimensions: 12'-0" W x 8'-0" H x 10'-0" D  
Fan Rating: 3 H.P.

Paint Spray Booth #3 Manufacturer: Binks  
(P/O 11659) Model & Serial No.: Unknown  
Booth Dimensions: 12'-0" W x 8'-0" H x 10'-0" D  
Fan Rating: 3 H.P.

The following systems were required to obtain local Permits to Operate because each system vents at least one sanding operation and each system has a flow rate in excess of 1,500 cfm (emissions could potentially exceed 2 lb/day). Although emissions from these systems are insignificant for Title V purposes, the systems are not being treated as insignificant emission units because they are subject to equipment specific requirements (e.g., emission limits).

Dust Collection System 1  
Manufacturer: Murphy Rogers Baghouse  
Model No.: MRT-9A  
Storage Capacity: 14 ft<sup>3</sup>

Filter Area: 104 ft<sup>2</sup>  
Fan: 5 hp, 1740 cfm

Dust Collection System 3  
Manufacturer: Murphy Rogers Baghouse  
Model No.: MRM-10-2D  
Storage Capacity: 14 ft<sup>3</sup>  
Filter Area: 256 ft<sup>2</sup>  
Fan: 7.5 hp, 2600 cfm

Dust Collection System 4  
Manufacturer: Murphy Rogers Baghouse  
Model No.: MRM-10-2D  
Storage Capacity: 14 ft<sup>3</sup>  
Filter Area: 256 ft<sup>2</sup>  
Fan: 7.5 hp, 2600 cfm

#### EMISSIONS:

Actual emissions from the spray booths during 1995 were as follows (see Appendix B for calculations):

VOC Emissions: 12.57 tons per year  
PM<sub>10</sub> Emissions: 0.03 tons per year  
Single HAP: 1.92 tons per year (toluene)  
Total HAP Emissions: 5.86 tons per year

The potential to emit for each of the sawdust handling systems is as follows (see Appendix B for calculations):

Potential PM <sub>10</sub> Emissions from the Sawdust Handling Systems			
Process	lbs/day	lbs/quarter (A)	tons/year
Sawdust Handling System #1	0.07	6	0.01
Sawdust Handling System #3	0.10	10	0.02
Sawdust Handling System #4	0.10	10	0.02

A - The quarterly emissions are based on 92 day/quarter.

#### APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS:

SMAQMD Rule 201 - General Permit Requirements - SIP approved on 7/13/87 (52 FR 26148):

##### Rule Description:

This rule provides an orderly procedure for the review of new sources of air pollution and of the modification and operation of existing sources through the issuance of permits.

##### Compliance Status:

C N Jolly Cabinets, Inc. has active permits to operate for all three paint spray booths and for dust collection systems #1,3 and 4, which were required to obtain permits per District policy. Dust collection systems 2, 5, and 6 are not required to be under permit.

SMAQMD Rule 202 - New Source Review - SIP approved on 6/19/85 (50 FR

25417):

Rule Description:

This rule sets procedures for review of new and modified stationary sources and provides the mechanisms for evaluating the applicability of BACT and/or offset requirements.

Compliance Status:

C N Jolly Cabinets, Inc. was reviewed pursuant to this rule as it existed at the time the paint spray booths were installed (1979). The facility currently has a 250 lb/day limitation encompassing all three spray booths. The dust collection systems resulted in an emissions reduction and therefore did not trigger BACT.

SMAQMD Rule 207 - Title V Federal Operating Permits - SIP Approved on 8/4/95 (60 FR 39862):

Rule Description:

This rule sets forth the procedures for review, issuance and renewal of Title V operating permits.

Compliance Status:

C N Jolly Cabinets, Inc. did not submit a timely and complete Title V application and is therefore currently operating in violation of Rule 207, §303.1. C N Jolly Cabinets, Inc. will continue to operate in violation until this Title V permit is issued.

The District attempted to notify C N Jolly Cabinets, Inc. of its need to file a Title V permit application or become a synthetic minor. However, the notice was sent to the wrong address and C N Jolly was not notified. As most small facilities, C N Jolly Cabinets, Inc., which has a total of approximately 30 employees and gross annual revenues of approximately one million dollars, can not afford to have its own environmental expert on staff and relies on the District for education and guidance on air quality issues. Once aware of its responsibility to file a Title V permit application, C. N. Jolly Cabinets quickly complied by submitting a Title V permit application.

SMAQMD Rule 401 - Ringelmann Chart - SIP Approved on 02/01/84 (49 FR 3987):

Rule Description:

This rule limits the discharge of air contaminants into the atmosphere through visible emissions and opacity.

Compliance Status:

Paint Booths: By applying the coatings inside the paint spray booth, which is equipped with a filter to control airborne particles, C N Jolly Cabinets can effectively remain in compliance with this rule.

Baghouses: The baghouses effectively control visible emissions from the woodworking operations.

SMAQMD Rule 404 - Particulate Matter - SIP Approved on 07/13/87 (52 FR 47490):

Rule Description:

This rule limits the quantity of particulate matter in the atmosphere

through establishment of an emission concentration limit (0.1 grains/dscf).

Compliance Status:

Paint Booths: PM10 emissions were calculated to be 64.6 lb/year. Assuming a 150 fpm face velocity at the booth's opening, the air flow through the booth can be calculated as follows: 150 fpm \* 8 ft high \* 8 ft wide = 9600 cfm

Assuming all the PM10 emissions (64.5 lb) are released during one work day (8 hrs) from the smallest spray booth (8'x8'x7'-6"), hourly emissions = 8.075 lb/hr = 942 grains/min

Therefore, the worst case grain loading can be estimated to be (942 gr/min)/(9600 cfm) = 0.098 grains/dscf and the facility can be expected to be in compliance with this requirement.

Sawdust Handling Systems: As mentioned previously, according to the CARB study, these systems are expected to have a grain loading of 0.0168 grains/scf when sanding (worst case scenario). Assuming a 98% control efficiency for the baghouses, the amount of particulate discharged to the atmosphere would be 0.0168 grains/scf x 0.02 = 0.0003 grains/scf, which is well below the 0.1 grain/scf limit of this rule.

SMAQMD Rule 441 - Organic Solvents - SIP Approved on 12/05/84 (49 FR 47490):

Rule Description:

This rule limits emissions of volatile organic compounds into the atmosphere that may result from the use of organic solvents.

Compliance Status:

The coatings used by C.N. Jolly are not photochemically reactive and are dried at ambient temperature. Therefore, the applicable limit pursuant to this rule is 2,970 pounds of organic materials per day. The facility complies with this limit by complying with its local permit to operate which limits the facility-wide ROC emissions to 250 lbs/day.

SMAQMD Rule 463 - Wood Products Coatings - Not Yet SIP Approved:

Rule Description:

This rule establishes limits on the emission of volatile organic compounds (VOC) from coatings and strippers used on wood products, and from products used in surface preparation and cleanup.

Compliance Status:

This Rule was adopted by the Board on Sep. 5, 1996 and has not yet been incorporated into the SIP. It is therefore, only enforceable by the District at this time. Once U.S. EPA incorporates Rule 463 into the State Implementation Plan (SIP) for the Sacramento Metropolitan Air Quality Management District, these requirements will become enforceable by the District, U.S. EPA, and the public.

SMAQMD Rule 602 - Breakdown Conditions: Emergency Variance - SIP Approved on 12/05/84 (49 FR 47490):

Rule Description:

This rule specifies conditions and procedures for breakdowns and emergency variances.

Compliance Status:

C N Jolly Cabinets is aware of this requirement and it is prepared to notify the district in case of a breakdown.

SMAQMD Permit to Operate #11657-9:

Conditions #1 & 2 are not federally enforceable. Conditions #3, 4, 5 are federally enforceable since they are required for demonstrating compliance with Rules 202, 401, which are SIP-approved rules.

SMAQMD Permit to Operate #13064-6:

Conditions #1, 2, 3, 8 and 9 are not federally enforceable. Conditions #4, 5, 6 are federally enforceable since they are required for demonstrating compliance with Rule 202, a SIP approved rule. Condition #7 is federally enforceable because it is a requirement of Rule 441, Section 401.

STREAMLINING MULTIPLE APPLICABLE REQUIREMENTS:

Daily Emissions Limit -- NSR Permit vs. Rule 441:

1. NSR permit condition #4 limits reactive organic compound (ROC) emissions from the facility's coating operations (all three paint spray booths) to 250 lb/day. Records are required to be kept on a daily basis.

2. Section 302 limits emissions of photochemically reactive organic materials to 39.7 lb/day or 7.9 lb/hr from any equipment (each paint spray booth).

Section 303 of Rule 441 limits emissions of non-photochemically reactive organic compounds to 2,970 lb/day from any equipment (each paint spray booth).

There is no particular recordkeeping requirement. However, the applicant is required to submit to the APCO, upon request, written evidence of the chemical composition, physical properties and amount consumed for each organic solvent used.

Analysis:

The NSR permit limit is clearly more stringent than the Rule 441, Section 303 limit. The recordkeeping requirements of the permit are also more stringent than those of Rule 441.

Although the facility does not use photochemically reactive coatings, the limits of Rule 441, Section 302 are more stringent than the NSR permit limit.

Proposed streamlined permit conditions:

1. Reactive organic compound emissions (photochemically and non-photochemically reactive compounds) from the facility's coating operations shall not exceed 250 pounds during any one day.

2. C N Jolly shall not discharge into the atmosphere more than 39.7 pounds of organic materials in any one day, nor more than 7.9 pounds in any one hour, from any article, machine, equipment or other contrivance used for employing, or applying, any photochemically reactive solvent, as defined in Rule 441, or material containing such photochemically reactive solvent, unless said discharge has been reduced by at least 85%.

3. A record of the daily usage (gal/day) of all coatings, thinners, reducers, catalysts, and cleanup solvents shall be kept on the premises at all times. The record shall include the product name, manufacturer, product ID number, VOC content (lb/gal), the mixing ratio for each type of coating used, and daily emissions of Reactive Organic Compounds (ROCs).

4. Until Rule 463 is approved into the State Implementation Plan for the Sacramento Metropolitan Air Quality Management District, the permittee shall also maintain a record of whether the coating, as applied, contains photochemically reactive solvents as per Rule 441, Section 203 and daily emissions (in lb/day) of photochemically reactive compounds (calculated as per permit condition number #).

PROPOSED EXEMPTIONS FROM OTHERWISE APPLICABLE REQUIREMENTS (PERMIT SHIELD):

40 CFR, Part 63, Subpart JJ (Wood Furniture Manufacturing Operations NESHAP) applies to major sources as defined in 40 CFR, Part 63, Subpart A, Section 63.2. C N Jolly will limit HAP emissions to less than 10 tons/year for any single HAP and 25 tons/year for all HAPs combined (see Title V permit conditions). Therefore C N Jolly is not an affected source as defined in 40 CFR, Part 63, Subpart JJ, Section 63.800.

GENERAL REQUIREMENTS

TITLE V PERMIT MODIFICATIONS AND RENEWAL

1. The owner or operator of a stationary source shall submit to the Air Pollution Control Officer a complete Title V permit application for renewal no later than 12 months prior to the expiration date of the Title V permit. [Rule 207, §301.4]

2. The owner or operator of a stationary source shall submit to the Air Pollution Control Officer a complete Title V permit application for minor Title V permit modification. The application shall be submitted after receiving any required preconstruction permit from the District and before commencing operation associated with the Minor Title V permit modification. [Rule 207, §301.6]

3. The owner or operator of a stationary source shall submit to the Air Pollution Control Officer a complete Title V permit application for Significant Title V permit modification. The application shall not be submitted prior to receiving any required preconstruction permit from the District but no later than 12 months after commencing an operation associated with the Significant Title V permit modification. Where an existing federally enforceable Title V permit condition would prohibit such change in operation or the stationary source is not required to obtain a preconstruction permit, the owner or operator must obtain a Title V permit modification before commencing operation. [Rule 207, §301.7]

4. The applicant shall submit to the Air Pollution Control Officer timely updates to the Title V application as new requirements become applicable to the source. [Rule 207, §302.1]

5. The applicant shall submit to the Air Pollution Control Officer any additional information necessary to correct any incorrect information in the Title V permit application upon becoming aware of such incorrect submittal or if the applicant is notified by the Air Pollution Control Officer of such incorrect submittal. [Rule 207, §302.2]

6. The applicant shall submit to the Air Pollution Control Officer any additional information relating to the Title V application within 30 days if such information is requested in writing by the Air Pollution Control Officer. [Rule 207, §302.3]

7. Title V permit expiration terminates the stationary source's right to operate unless a timely and complete Title V permit application for renewal has been submitted and the stationary source complies with subsections 303.1a, b, c, and d of Rule 207, in which case the existing Title V permit will remain in effect until the Title V permit renewal has been issued or denied. [Rule 207, §303.2]

8. Any Title V application form, report, or compliance certification submitted pursuant to this permit shall contain certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [Rule 207, §304]

9. This Title V permit shall have a 5-year fixed term from the date of issuance. The Title V permit shall have a new 5-year fixed term from the date of final action on reopening if the responsible official chooses to submit to the District a complete Title V application for renewal upon reopening of the Title V permit pursuant to Sections 411 or 412 of Rule 207 and the Title V permit is renewed according to the administrative procedures listed in Sections 401 through 408 of Rule 207. [Rule 207, §306]

#### COMPLIANCE

10. The permittee must comply with all conditions of the Title V permit. [Rule 207, §305.1k1]

11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the Title V permit. [Rule 207, §305.1k2]

12. This Title V permit may be modified, revoked, reopened, and reissued, or terminated for cause. [Rule 207, §305.1k3]

13. The permittee shall furnish to the Air Pollution Control Officer, within a reasonable time, any information that the Air Pollution Control Officer may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit pursuant to Section 411 of Rule 207 or to determine compliance with this Title V permit. Upon request, the permittee shall also furnish to the Air Pollution Control Officer copies of records required to be kept by conditions of this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. [Rule 207, §305.1k4]



14. Noncompliance with any Title V permit condition is grounds for Title V permit termination, revocation and reissuance, modification, enforcement action, or denial of the Title V permit renewal application. Any violation of the Title V permit shall also be a violation of Rule 207. [Rule 207, §305.1k5]

15. A pending Title V permit action or notification of anticipated noncompliance does not stay any permit condition. [Rule 207, §305.1k6]

16. This Title V permit does not convey any property rights of any sort, or any exclusive privilege. [Rule 207, §305.1k7]

17. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Air Pollution Control Officer or an authorized representative to perform all of the following: [Rule 207, §413.1]

A. Enter upon the stationary source's premises where this source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Title V permit;

C. Inspect at reasonable times the stationary source, equipment (including monitoring and air pollution control equipment), practices, operations regulated or required under this Title V permit; and

D. As authorized by the Federal Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the Title V permit conditions or applicable federal requirements.

#### REPORTS AND RECORDKEEPING

18. The permittee shall submit to the Air Pollution Control Officer and EPA (Air-3, U.S. EPA, Region IX) on an annual basis, unless required more frequently by additional applicable federal requirements such as Section 114(a)(3) and 504(b) (42 U.S.C. Sections 7414(a)(3) and 7661c(b)) of the Federal Clean Air Act, a certification of compliance by the responsible official with all terms and conditions contained in the Title V permit, including emission limitations, standards, or work practices. The compliance certification shall include the following: [Rule 207, §413.4]

A. The identification of each term or condition of the Title V permit that is the basis of the certification;

B. The compliance status and whether compliance was continuous or intermittent;

C. The method(s) used for determining the compliance status of the source, currently and over the reporting period;

D. Such other facts as the Air Pollution Control Officer may require to determine the compliance status of the source; and

E. In accordance with Section 305f of Rule 207, a method for monitoring the compliance of the stationary source with its emissions limitations, standards, and work practices.

19. The permittee shall report within 24 hours of detection any deviation from the Title V permit conditions not attributable to an emergency. In order to fulfill the reporting requirement of this condition, the permittee shall notify the Air Pollution Control Officer by telephone followed by a written statement describing the nature of the deviation from the permit

conditions. [Rule 207, §501.3]

20. The permittee shall maintain on site, records of operation for all emissions units included in the Title V permit. The records shall contain all of the following information and shall be made available to the Air Pollution Control Officer and EPA for review upon request: [Rule 207, §502.1 & 502.2]

A. Monitoring Records:

I. The date, place as defined in the Title V permit, and time of sampling or measurements;

II. The date(s) analyses were performed;

III. The company or entity that performed the analyses;

IV. The analytical techniques or methods used;

V. The results of such analyses; and

VI. The operating conditions existing at the time of sampling or measurement.

B. Recordkeeping for process weight, fuel usage, and operating hours as specified in the Title V permit conditions.

21. All required monitoring data and support information must be kept by the stationary source for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recording for continuous monitoring instrumentation, and copies of all reports required by the Title V permit. [Rule 207, §502.3]

RINGELMANN CHART

22. Except as otherwise provided in SMAQMD Rule 401, Section 100, a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant, other than uncombined water vapor, for a period or periods aggregating more than three minutes in any one hour which is:

A. As dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or

B. Of such opacity as to obscure a human observer's view, or a certified calibrated in-stack opacity monitoring system to a degree equal to or greater than No. 1 on the Ringelmann Chart. [Rule 401, §301]

PARTICULATE MATTER

23. A person shall take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line from which the emission originates, from any construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation. Reasonable precautions shall include, but are not limited to:

A. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the construction of roadways or the clearing of land.

B. Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts;

C. Other means approved by the Air Pollution Control Officer.  
[Rule 403, §301]

24. Except as otherwise provided in condition #25, a person shall not

discharge into the atmosphere from any source particulate matter in excess of 0.23 grams per dry standard cubic meter (0.1 grains per dry standard cubic foot). [Rule 404, §301]

25. A person shall not discharge into the atmosphere particulate matter from the burning of any kind of material containing carbon in a free or combined state, from any single source of emission whatsoever, combustion contaminants in any state or combination thereof exceeding in concentration at the point of discharge: 0.23 grams per dry standard cubic meter (0.1 grains per dry standard cubic foot) of gas calculated to 12% of carbon dioxide (CO<sub>2</sub>) at standard conditions. [Rule 403, §302]

#### SULFUR COMPOUNDS

26. A person shall not discharge into the atmosphere from any single source of emission whatsoever sulfur compounds in any state or combination thereof exceeding in concentration at the point of discharge: sulfur compounds, calculated as sulfur dioxide (SO<sub>2</sub>): 0.2% by volume, except as otherwise provided in condition 27. [Rule 406, §301]

27. Except as otherwise provided in SMAQMD Rule 420, Section 100, a person shall not burn any gaseous fuel containing sulfur compounds in excess of 1.14 grams per cubic meter (50 grains per 100 cubic feet) of gaseous fuel, calculated as hydrogen sulfide at standard conditions, or any liquid fuel or solid fuel having a sulfur content in excess of 0.5% by weight. [Rule 420, §301]

#### ARCHITECTURAL COATING

28. Any coating applied to stationary structures and their appurtenances, to mobile homes, to pavements, or to curbs, shall meet the requirements of SMAQMD Rule 442. [Rule 442]

29. All VOC-containing materials shall be stored in closed containers when not in use. In use includes, but is not limited to: being accessed, filled, emptied, maintained, or repaired. [Rule 442, §304]

30. A person shall not use volatile organic compounds for the cleanup of spray equipment unless equipment for collection of the cleaning compounds and minimizing its evaporation to the atmosphere is used. [Rule 420, §301]

#### PERMIT SHIELD

31. C N Jolly Cabinets, Inc. is not subject to the National Emission Standards for Hazardous Air Pollutants for Wood Furniture Manufacturing Operations (40 CFR, Part 63, Subpart JJ). [40 CFR, Part 63, Subpart JJ, Section 63.800]

#### EQUIPMENT BREAKDOWNS

32. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology based emission limitations if the following conditions are met: [Rule 207, §414]

A. The affirmative defense of an emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

I. An emergency occurred and that the permittee can identify the cause(s)

of the emergency;

II. The permitted facility was at the time being properly operated;

III. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the Title V permit;

IV. The permittee submitted notice of the emergency to the Air Pollution Control Officer within 2 working days of the time when emissions limitations were exceeded due to the emergency. The notice must contain a description of the emergency, and corrective actions taken.

B. In any enforcement proceedings, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

33. The permittee must notify the Air Pollution Control Officer of any occurrence which constitutes an emergency as defined in Section 212 of Rule 207 as soon as reasonably possible, but no later than one hour after its detection. If the emergency occurs when the Air Pollution Control Officer cannot be contacted, their report of the emergency shall be made at the commencement of the next regular working day. The notification shall identify the time, specific location, equipment involved, and to the extent known the cause(s) of the occurrence. [Rule 207, §501.2]

34. A person shall notify the Air Pollution Control Officer of any occurrence which constitutes a breakdown condition as soon as reasonably possibly, but no later than one hour after its detection. If the breakdown occurs when the Air Pollution Control Officer cannot be contacted, the report of breakdown shall be made at the commencement of the next regular working day. [Rule 602, §301.1]

35. The notification shall identify the time, specific location, equipment involved, and to the extent known the cause(s) of the occurrence. [Rule 602, §301.2]

36. Upon notification of the breakdown condition, the Air Pollution Control Officer shall investigate the breakdown condition in accordance with uniform written procedures and guidelines relating to logging of initial reports on appropriate forms, investigation, and enforcement follow-up. If the occurrence does not constitute a breakdown condition, the Air Pollution Control Officer may take appropriate enforcement action. [Rule 602, §301.3]

37. An occurrence which constitutes a breakdown condition, and which persists only until the end of the production run or 24 hours, whichever is sooner (except for continuous air pollution monitoring equipment, for which the period shall be 96 hours) shall constitute a violation of any applicable emission limitation or restriction prescribed by these Rules and Regulations; however, the Air Pollution Control Officer may elect to take no enforcement action if the owner or operator demonstrates to his satisfaction that a breakdown condition exists and the following requirements are met: [Rule 602, §302.1]

A. The notification required in condition #34 is made; and

B. Immediate appropriate corrective measures are undertaken and compliance is achieved, or the process is shutdown for corrective measures before commencement of the next production run or within 24 hours, whichever is sooner (except for continuous air pollution monitoring equipment for which the period shall be 96 hours). If the owner or operator elects to shut down rather than come into immediate compliance, (s)he must nonetheless take whatever steps are possible to minimize the impact of the breakdown within the 24 hour period; and

C. The breakdown does not interfere with the attainment and maintenance of any national ambient air quality standard.

38. An occurrence which constitutes a breakdown condition shall not persist longer than the end of the production run or 24 hours, whichever is sooner (except for continuous air pollution monitoring equipment, for which the period shall be 96 hours), unless an emergency variance has been obtained. [Rule 602, §302.2]

39. If the breakdown condition will either require more than 24 hours to correct or persists longer than the end of the production run (except for continuous air pollution monitoring equipment, for which the period shall be 96 hours) the owner or operator may, in lieu of shutdown, request the Air Pollution Control Officer to commence the emergency variance procedure set forth in Section 304 of Rule 602. [Rule 602, §302.2]

40. No emergency variance shall be granted unless the chairperson of the Hearing Board or other designated member(s) of the Hearing Board finds that: [Rule 602, §304.2]

A. The occurrence constitutes a breakdown condition;

B. Continued operation is not likely to create an immediate threat or hazard to public health or safety; and

C. The requirements for a variance set forth in Health & Safety Code Sections 42352 and 42353 have been met;

D. The continued operation in a breakdown condition will not interfere with the attainment or maintenance of the national ambient air quality standards.

41. At any time after an emergency variance has been granted, the Air Pollution Control Officer may request for good cause that the chairperson or designated member(s) reconsider and revoke, modify or further condition the variance. The procedures set forth in Section 304.1 shall govern any further proceedings conducted under this section. [Rule 602, §304.3]

42. An emergency variance shall remain in effect only for as long as necessary to repair or remedy the breakdown condition, but in no event after a properly noticed hearing to consider an interim or 90 day variance has been held, or 15 days from the date of the subject occurrence, whichever is sooner. [Rule 602, §304.4]

43. Within one week after a breakdown condition has been corrected, the owner or operator shall submit a written report to the Air Pollution Control Officer on forms supplied by the Air Pollution Control Officer describing the causes of the breakdown, corrective measures taken, estimated emissions during the breakdown and a statement that the condition has been corrected, together with the date of correction and proof of compliance. The Air Pollution Control Officer may, at the request of the owner or operator for good cause, extend up to 30 days the deadline for submittal of the report described in this subsection. [Rule 602, §401]

44. The burden of proof shall be on the owner or operator of the source to provide sufficient information to demonstrate that a breakdown did occur. If the owner or operator fails to provide sufficient information, the Air Pollution Control Officer shall undertake appropriate enforcement action. [Rule 602, §401.1]

45. Any failure to comply, or comply in a timely manner, with the reporting

requirements established in Sections 301.1 and 401 of Rule 602 shall constitute a separate violation of this rule. [Rule 602, §401.2]

46. It shall constitute a separate violation of this rule for any person to file with the Air Pollution Control Officer a report which falsely, or without probable cause, claims that an occurrence is a breakdown condition. [Rule 602, §401.3]

#### TITLE VI REQUIREMENTS (OZONE DEPLETING SUBSTANCES)

47. Persons opening appliances containing CFCs for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR, § 82.156. [40 CFR, Part 82, Subpart F]

48. Equipment used during the maintenance, service, repair, or disposal of appliances containing CFCs must comply with the standards for recycling and recovery equipment pursuant to 40 CFR, § 82.158. [40 CFR, Part 82, Subpart F]

49. Persons performing maintenance, service, repair or disposal of appliances containing CFCs must be certified by an approved technician certification program pursuant to 40 CFR, § 82.161. [40 CFR, Part 82, Subpart F]

#### PAYMENT OF FEES

50. The fee for (1) the issuance of an initial Title V operating permit, (2) the renewal and/or inspection of a Title V operating permit, (3) the modification of a Title V operating permit or (4) an administrative Title V permit amendment shall be based on the actual hours spent by the District staff in evaluating the application and processing the operating permit. The fee shall be assessed in accordance with the hourly rate established in Rule 301, Section 308.12. [Rule 207, Section 305.7 and Rule 301, Section 313]

51. After the provisions for granting permits as set forth in Rule 207 have been complied with, the permittee will be notified by mail of the fee due and payable and the date the fee is due. If the fee is not paid by the specified due date, the fee shall be increased by one half the amount and the applicant/permittee shall be notified by mail of the increased fee. If the increased fee is not paid within 30 days after notice the application/permit will be canceled/revoked and the applicant/permittee will be notified by mail. [Rule 207, Section 305.7]

#### ACCIDENTAL RELEASES

52. Should the facility as defined in 40 CFR, §68.3, become subject to Part 68, the permittee shall submit a risk management plan (RMP) by the date specified in 40 CFR §68.10, and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by Rule 207, Section 413.4. [40 CFR, Part 68]

#### EQUIPMENT-SPECIFIC REQUIREMENTS

##### I. Spray Booths:

A. EQUIPMENT DESCRIPTION: The requirements specified under the following subsections apply to the equipment listed below:

1. Paint Spray Booth #1

Manufacturer Binks

Model and Serial No.: Unknown

Booth Dimensions: 8'-0" Wide x 8'-0" High x 7'-6" Deep

Rating: 2 H.P. Exhaust Fan

P/O No.: 11657 (for reference purposes only - not federally enforceable)

2. Paint Spray Booth #2

Manufacturer Viking

Model and Serial No.: Unknown

Booth Dimensions: 12'-0" Wide x 8'-0" High x 10'-0" Deep

Rating: 3 H.P. Exhaust Fan

P/O No.: 11658 (for reference purposes only - not federally enforceable)

3. Paint Spray Booth #3

Manufacturer Binks

Model and Serial No.: Unknown

Booth Dimensions: 12'-0" Wide x 8'-0" High x 10'-0" Deep

Rating: 3 H.P. Exhaust Fan

P/O No.: 11659 (for reference purposes only - not federally enforceable)

B. EQUIPMENT-SPECIFIC FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this subsection are enforceable by the District, U.S. EPA, and the public.

EMISSION LIMITS:

1. The coating operation shall not discharge into the atmosphere any visible air contaminant other than uncombined water vapor, for a period or periods aggregating more than three minutes in any one hour, which is 20% opacity or greater. [Rule 401, §301]

2. Reactive organic compound emissions (photochemically and non-photochemically reactive compounds) from the facility's coating operations shall not exceed 250 pounds during any one day. [Rule 441, §303, and Rule 202, §302]

3. C N Jolly shall not discharge into the atmosphere more than 39.7 pounds of organic materials in any one day, nor more than 7.9 pounds in any one hour, from any article, machine, equipment or other contrivance used for employing, or applying, any photochemically reactive solvent, as defined in Rule 441, or material containing such photochemically reactive solvent, unless said discharge has been reduced by at least 85%. [Rule 441, §302]

4. C N Jolly shall not discharge into the atmosphere 10 tons/year or more of a single hazardous air pollutant (HAP) or 25 tons/year or more of any combination of hazardous air pollutants as defined in Section 112(b) of the Clean Air Act.

MONITORING:

5. A manometer indicating the static pressure differential across the exhaust filters shall be properly maintained and accessible to the operator. The pressure differential shall not exceed 0.25 inch of water while in operation. [Rule 441, §303, and Rule 202, §302]

RECORDKEEPING:

6. A record of the daily usage (gal/day) of all coatings, thinners, reducers, catalysts, and cleanup solvents shall be kept on the premises at all times. The record shall include the product name, manufacturer, product ID number, VOC content (lb/gal), the mixing ratio for each type of coating used, and whether the coating, as applied, contains photochemically reactive solvents as defined by Rule 441, Section 203. [Rule 441, §303, and Rule 202, §302]

7. A monthly record of HAP emissions shall be kept on the premises at all times. The record shall include:

A. For every coating material, the name, CAS number, and monthly emissions (in tons/month) for each HAP based on coating usage and hazardous ingredients information found in the Material Safety Data Sheet.

B. Monthly emissions of all HAPs combined (in tons/month).

C. A tally of single HAP and combined HAP emissions for the calendar year (tons/year).

C. NON-FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this section are enforceable by the District only.

8. All cloth or paper used for surface preparation, clean up and paint removal shall be disposed of in closed containers.

9. This source shall not discharge into the atmosphere any air contaminant which constitutes a public nuisance.

D. FUTURE FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this section are currently enforceable by the District only. However, upon U.S. EPA incorporation of Rule 463 into the State Implementation Plan (SIP) for the Sacramento Metropolitan Air Quality Management District, these requirements will become enforceable by the District, U.S. EPA, and the public.

EQUIPMENT DESIGN AND OPERATION REQUIREMENTS:

10. On and after 7-1-97, a person subject to the provisions of this rule shall not apply any wood product coating to any wood products, unless one of the following application methods is used:

A. Electrostatic application equipment

B. High Volume Low Pressure spray equipment

C. Dip coat

D. Flowcoat

E. Hand application methods, such as brush or roller

F. Roll coater

G. Low Volume Low Pressure spray equipment

H. Air assisted airless, for touch-up and repair only

I. Any other equivalent method which has been approved in writing by the Air Pollution Control Officer and the U.S. Environmental Protection Agency. [Rule 463, §301]

11. Except as provided in Sections 110, 305, and 306 of Rule 463, no person shall apply any coating, to a new wood product, which has a volatile



organic compound (VOC) content exceeding the applicable limits specified below: [Rule 463, §302]

Note: If emission averaging is not used to achieve compliance with this section, VOC limits expressed in grams per liter shall be used. If emission averaging is used to achieve compliance with this section, VOC limits expressed in pounds of VOC per pound of solids shall be used.

COATING	VOC LIMITS	
	Grams Per Liter of Coating(lbs VOC/lbs. solids)	
	Less water and Less Exempt Compounds On and After 7/1/97On and After 7/1/2005	
Clear Topcoats	550	(1.37)
Conversion Varnish	550	(1.37)
Filler	500	(0.66)
High-Solid Stain	550	(1.23)
Inks	500	(0.96)
Mold-Seal Coating	750	(4.20)
Multi-Colored Coating	685	(2.60)
Pigmented Coating	550	(1.10)
Sealer	550	(1.39)
	275	(0.35)
	550	(1.20)
	275	(0.18)
	350	(0.42)
	500	(0.96)
	750	(4.20)
	275	(0.33)
	275	(0.25)
	275	(0.36)

	VOC LIMITS	
	Grams Per Liter of Material (lbs of VOC/lbs. of solids)l	
	On and After 7/1/97On and After 7/1/2005	
Low-Solid Stains, Toners, Washcoats	480 (4.00)	120 (1.00)

12 The VOC content of coatings, except low-solid stains, toners, and washcoats (as defined in Rule 463), shall be determined in accordance with EPA Method 24 and the following equation: [Rule 463, §403 & 503.1]

Where: G1 = Weight of VOC per volume of coating, less water and less exempt compounds.

Wv= Weight of volatile compounds, in grams.

Ww= Weight of water, in grams.

Wec= Weight of exempt compounds, in grams.

Vm= Volume of coating material, in liters.

Vw= Volume of water, in liters.

Vec= Volume of exempt compounds, in liters.

13 The VOC content of low-solid stains, toners and washcoats shall be determined in accordance with EPA Method 24 and the following equation:

[Rule 463, §404 & 503.1]

Where: Wv= Weight of all volatile compounds.

Ww= Weight of water.

Wec= Weight of compounds listed as exempt in Section 215 from the definition of VOC.

Vm= Volume of material.

The volume of material is defined as the volume of the original material, plus any VOC-containing material added to the original material. The original material is the material before any VOC-containing material such as solvent is added for purposes of mixing or thinning. The VOC content shall exclude any colorant added to a tint base.

14. Pounds of VOC per pound of solids is the weight of VOC per weight of coating solids within any given volume of coating, and can be calculated by the following equation: [Rule 463, §405.1]

Where: Ws = Weight of Volatile compounds in pounds

Ww= Weight of water in pounds

Wes= Weight of exempt compounds in pounds

Wr= Weight of coating solids in pounds

15. For coatings that contain reactive diluents, the VOC content of the coating is determined after curing. The pounds of VOC per pound of coating solids shall be calculated by the following equation: [Rule 463, §405.2]

Where: Ws= Weight of Volatile compounds in pounds, emitted into the atmosphere during curing

Ww = Weight of water in pounds, emitted into the atmosphere during curing

Wes= Weight of exempt compounds in pounds, emitted into the atmosphere during curing

Wr= Weight of coating solids in pounds, prior to reaction

16. Notwithstanding the VOC limits specified in condition #11, a person may apply a sealer with a VOC content not exceeding 680 grams/liter, provided that the topcoat used on the same wood product does not exceed 275 grams/liter. [Rule 463, §302.3]

17. As an alternative, C N Jolly Cabinets may comply with the VOC limits specified in Condition #11, by:

A. Using an approved air pollution control system as specified in Section 305.1 of Rule 463, or

B. Using an averaging approach for all or a portion of the coatings used at the facility, provided that all requirements of Section 306 of Rule 463 are met. [Rule 463, §305 & 306]

18. C N Jolly Cabinets shall comply with the following surface preparation and cleanup materials requirements:

A. Spray gun nozzles only, may be soaked in solvent-based materials for cleaning, provided the container (not to exceed five (5) gallons in size) is kept tightly covered at all times except when accessing the container.

B. Effective 7-1-97, closed containers shall be used for the disposal of cloth or paper used for surface preparation, cleanup, and coating removal.

C. Effective 7-1-97, VOC-containing materials shall be stored in containers, which are closed when not in use, and shall be disposed of in a manner that the VOC are not emitted into the atmosphere.

D. Effective 7-1-97, a person shall not use solvent-based VOC-containing materials for the cleanup of spray equipment used in wood products coating application operations, unless the spray equipment is disassembled and cleaned in an enclosed gun cleaner.

E. Effective 7-1-97, a person shall not perform surface preparation or cleanup with a material containing VOC in excess of 200 grams per liter (1.67 pounds per gallon). [Rule 463, §308]

19. Containers for all VOC-containing coatings shall be covered while in use, in order to minimize evaporative loss to the atmosphere. Covers need not be sealed and may have openings to allow access to the coating being used. [Rule 463, §309]

20. Each container of any coating, surface preparation material, or cleanup material, or stripper manufactured after 7-1-97 shall display its maximum VOC content of the coating, as applied, and after any thinning as recommended by the manufacturer, or shall have this information provided in a product data sheet supplied with the container. VOC content shall be displayed as grams of VOC per liter of coating including water and exempt solvents (as applied) and excluding water and exempt solvents (less water and less exempt solvent, and excluding any colorant added to tint bases), surface preparation and cleanup material, or stripper. VOC content displayed may be calculated using product formulation data, or may be determined using the test method in Section 503.1 of Rule 463.

Alternatively, containers for strippers subject to the provisions of Section 304 of Rule 463 may display only the partial vapor pressure. [Rule 463, §401]

#### MONITORING:

21. The composition of VOC shall be as specified on the manufacturer's label or data sheet, or as determined by ASTM Method E-260, General Gas Chromatograph. [Rule 463, §503.2]

22. Compounds exempted from VOC definition, as listed in Section 215 of Rule 463, shall be determined in accordance with ASTM D-4457-85, or ARB Method 432. If any of the perfluorocarbons or volatile cyclic and linear methyl siloxanes are being claimed as exempt compounds, the person making the claim must state in advance which compounds are present, and the EPA-approved test method used to make the determination of these compounds. [Rule 463, §503.3]

#### RECORDKEEPING:

23. In addition to any other applicable record keeping requirements C N Jolly Cabinets shall maintain the following records in order to evaluate compliance:

A. 1. A data sheet, material list, or invoice giving material name, manufacturer identification, material application, and VOC content; and  
2. Any catalysts, reducers, or other components used, and the mix ratio; and the applicable VOC limit from Section 302 or 303 of Rule 463, and the actual VOC content of the wood product coating as applied.

B. 1. Coating type shall be designated according to the coating categories as listed in Sections 302, 303, and 304 of Rule 463.

2. If at any time C N Jolly Cabinets uses coatings or materials exceeding the VOC limits specified in Sections 302, 303, and 304 of Rule 463, records shall be maintained on a daily basis showing the type and volume of materials used. [Rule 463, §501]

24. All records required by this rule shall be maintained for at least three years, and shall be made available to the Air Pollution Control Officer upon request. [Rule 463, §502]

25. Upon approval of Rule 463 into the State Implementation Plan, all records required by Rule 463 shall be maintained for at least five years. [Rule 207, §502.3]

## II. Sawdust/Sander Dust Collection Systems:

A. EQUIPMENT DESCRIPTION: The requirements specified under the following subsections apply to the equipment listed below:

### 1. Dust Collection System 1

Manufacturer: Murphy Rogers Baghouse

Model No.: MRT-9A

Storage Capacity: 14 ft<sup>3</sup>

Filter Area: 104 ft<sup>2</sup>

Fan: 5 hp, 1740 cfm

P/O No.: 13064 (for reference purposes only - not federally enforceable)

### 2. Dust Collection System 3

Manufacturer: Murphy Rogers Baghouse

Model No.: MRM-10-2D

Storage Capacity: 14 ft<sup>3</sup>

Filter Area: 256 ft<sup>2</sup>

Fan: 7.5 hp, 2600 cfm

P/O No.: 13065 (for reference purposes only - not federally enforceable)

### 3. Dust Collection System 4

Manufacturer: Murphy Rogers Baghouse

Model No.: MRM-10-2D

Storage Capacity: 14 ft<sup>3</sup>

Filter Area: 256 ft<sup>2</sup>

Fan: 7.5 hp, 2600 cfm

P/O No.: 13066 (for reference purposes only - not federally enforceable)

B. EQUIPMENT-SPECIFIC FEDERALLY ENFORCEABLE REQUIREMENTS: The requirements specified under this subsection are enforceable by the District, U.S. EPA, and the public.

## EMISSION LIMITATION

1. Emissions from each process shall not exceed the following:

System	Maximum allowable PM10 emission lbs/quarter (A)
Sawdust/Sanderdust Handling System #1	6
Sawdust/Sanderdust Handling System #3	10
Sawdust/Sanderdust Handling System #4	10

a - based on maximum system design flow rate, 24 hours per day, 92 days per quarter and an emission factor of 2.78e-8 lb/scf.

## EQUIPMENT OPERATION

2. Discharge of collected particulate matter from the baghouse shall be into a covered container and any transfer of this material shall be performed in such a manner as to prevent fugitive emissions.

## RECORDKEEPING

None required (maximum allowable emissions are based on operating 24 hours per day and 92 days per quarter)

## APPENDIX A

### EMISSIONS CALCULATIONS FOR INSIGNIFICANT EMISSIONS UNITS

#### EMISSIONS CALCULATIONS FOR INSIGNIFICANT EMISSIONS UNITS:

The potential to emit will be determined based PM emission factors and PM10 fractions from the California Air Resources Board (CARB) study; Fine particle emissions from stationary and miscellaneous sources in the South Coast Air Basin, February, 1979. Emissions will be assumed to be uncontrolled (no baghouse) and the equipment will be assumed to operate 24 hours/day. For systems serving sanding operations, it will be assumed 100% of the work performed is sanding. Systems that do not serve sanding operations will not use the sanding emission factor.

$$E = Q \times EF \times \% \text{ PM10} \times T \times 60 \text{ min/hr}$$

7,000 grains/lb

Where:

E = Emission rate (in lb/day)

Q = Flow rate (scfm)

EF = TSP emission factor (.0168 gr/scf for sanding & 0.003 gr/scf for nonsanding operations, CARB 2/79)

%PM10 = PM10 fraction in TSP (58% for sanding, CARB 2/79)

T = Hours of operation (hr/day)

System #2:

$$E = (1206 \text{ cfm})(0.003 \text{ gr/scf})(.58)(24 \text{ hr/day})(60 \text{ min/hr})$$

(7,000 grains/lb)

$$E = 0.4 \text{ lb/day (uncontrolled)}$$

System #5:

$$E = (5704 \text{ cfm})(0.0168 \text{ gr/scf})(.58)(24 \text{ hr/day})(60 \text{ min/hr})$$

(7,000 grains/lb)

$$E = 2 \text{ lb/day (uncontrolled)}$$

System #6:

$$E = (1656 \text{ cfm})(0.0168 \text{ gr/scf})(.58)(24 \text{ hr/day})(60 \text{ min/hr})$$

(7,000 grains/lb)

$$E = 0.6 \text{ lb/day (uncontrolled)}$$

Potential PM10 Emissions from the Sawdust Handling Systems			
Process	lbs/day	lbs/quarter (A)	tons/year
Sawdust Handling System #2	0.4	36.8	0.1
Sawdust Handling System #5	2.0	184.0	0.4
Sawdust Handling System #6	0.6	55.2	0.1
Totals	3.0	276.0	0.6

A - The quarterly emissions are based on 92 day/quarter.

#### APPENDIX B EMISSIONS CALCULATIONS FOR SIGNIFICANT EMISSIONS UNITS

##### EMISSIONS CALCULATIONS FOR SAWDUST/SANDER DUST COLLECTION SYSTEMS:

The potential to emit will be determined based PM emission factors and PM10 fractions from the California Air Resources Board (CARB) study; Fine particle emissions from stationary and miscellaneous sources in the South Coast Air Basin, February, 1979. Emissions will be assumed to be controlled by the baghouse (98% control efficiency) and the equipment will be assumed to operate 24 hours/day. It will be assumed 100% of the work performed is sanding.

$$E = Q \times EF \times \% \text{ PM}_{10} \times T \times 60 \text{ min/hr} \times 98\% \text{ baghouse efficiency}$$

7,000 grains/lb

Where:

E = Emission rate (in lb/day)

Q = Flow rate (scfm)

EF = TSP emission factor (.0168 gr/scf for sanding & 0.003 gr/scf for nonsanding operations, CARB 2/79)

%PM10 = PM10 fraction in TSP (58% for sanding, CARB 2/79)

T = Hours of operation (hr/day)

System #1:

$$E = (1740 \text{ cfm})(0.0168 \text{ gr/scf})(.58)(24 \text{ hr/day})(60 \text{ min/hr}) * 0.02$$

(7,000 grains/lb)

$$E = 0.07 \text{ lb/day (controlled)}$$

System #3

$$E = (2600 \text{ cfm})(.0168 \text{ gr/scf})(.58)(24 \text{ hr/day})(60 \text{ min/hr}) * 0.02$$

(7,000 grains/lb)

$$E = 0.1 \text{ lb/day (controlled)}$$

System #4

$$E = (2600 \text{ cfm})(.0168 \text{ gr/scf})(.58)(24 \text{ hr/day})(60 \text{ min/hr}) * 0.02$$

(7,000 grains/lb)

$$E = 0.1 \text{ lb/day (controlled)}$$

Potential PM10 Emissions from the Sawdust/Sanderdust Handling Systems			
Process	lbs/day	lbs/quarter (A)	tons/year

Sawdust Handling System #1	0.07	6.0	0.6
Sawdust Handling System #3	0.1	10.0	1.0
Sawdust Handling System #4	0.1	10.0	1.0
Totals	0.3	26.0	2.6

A - The quarterly emissions are based on 92 day/quarter.